

REMARKS

Claims 1-30 remain in the application, with the examiner indicating that claims 5, 6, 14-17, 20, 21 and 25 are withdrawn from consideration as being drawn to non-elected species. By means of the arguments presented below, it is believed that the examiner will agree that generic claim 1 should be allowed, and that thus claims 5, 6, 14-17, 20, 21 and 25 should be permitted back into consideration, and should be considered allowable along with claim 1.

In paragraph 8 of the Office action, the examiner has indicated claim 2 is indefinite because claim 2 recites that the blind bore receives the end of the valve piston or the thrust rod, and that this is different from the figures. However, the structure which claim 2 recites is definite. It is clear that claim 2 recites that the end of the nozzle needle has a blind bore, and that the end of either the valve piston or the thrust rod is received within the blind bore of the nozzle needle. The specification describes such structure at page 11, lines 12-16.

This section of the specification recites an alternative which does not use a thrust peg 15.

In paragraph 9 the examiner has indicated claim 3 to be indefinite because claim 3 recites a blind bore in either the valve piston 6, or the thrust rod 8. Claim 3 has been amended to recite that the valve piston 6, the thrust rod 8 and the guide sleeve 16 form a unit, and that the recess is formed within this unit. This change in the wording of claim 3 should remove the examiner's objection to the wording of the claim, as the claim is now definite. It is clear, as can be seen from an inspection of the figures, especially elected figure 4, that the valve piston 6, the thrust rod 8 and the guide sleeve 16 do indeed form a unit which has a recess in it. Further, as can be seen in figure 4, the end of nozzle needle 14 is received within this recess.

In paragraphs 11 and 12, the examiner has rejected claims 1, 4, 9, and 24 under 35 USC 103 as unpatentable over Murakami et al in view of the Jepson portion of

applicants' claim 1. To make this rejection, the examiner has asserted that in Murakami et al the nozzle needle 220 protrudes into a guide sleeve 212, and that the thrust rod 221 is also received in the guide sleeve.

However, a close inspection of Murakami et al reveals that element 212 is not considered to be a sleeve. Column 8, lines 31-45 of Murakami et al indicate that element 212 is a distance piece which helps to connect nozzle body 213 with injector housing 91. In particular, lines 33-35 indicate that retaining nut 214 joins nozzle body 213 to housing 91 through distance piece 212.

At another location, column 13, lines 30-35, Murakami et al say that nozzle body 213 and injector body 91 are joined through a packing chip 212 and retaining nut 214. According to this reading then, element 212 is not a guide sleeve as the examiner has indicated, but rather it is a packing chip, which helps to seal between the nozzle body 213 and the injector body 91.

Thus, the examiner's reading that Murakami et al teach a guide sleeve at 212 is a mistaken interpretation of that element.

The examiner goes on to indicate that lines 5-6 of claim 1 recite a valve piece 2, and that the valve piston 6 is guided within this valve piece 2. The examiner has somehow jumped from this reading of claim 1, which is a rather loose compilation of structure, to say that a precise guide for the valve piston can be formed outside of the injector housing and inserted into the housing during the manufacture process. This is a clear case of the examiner looking for details which are only taught within the claimed structure, and forcing a reading of those details onto the prior art so as to be able to make a rejection.

Claim 1, at lines 5-6, recites that a valve piston 6 is guided within a valve piece 2. But this valve piece 2 is not the same element as is later recited in the claim as guide sleeve 16. This valve piece and guide sleeve are clearly different structure, as claim 1 indicates, and not, as the examiner has suggested, the same element.

Moreover, as pointed out above, nothing which is taught by Murakami et al can be considered to be a guide sleeve. Also, nothing within claim 1 can be considered to teach a guide sleeve as part of the prior art. Thus it is clear that these pieces of prior art cannot properly be combined to form a rejection of claim 1 under 35 USC 103.

While certainly guide sleeves are known, there is no teaching in the prior art as presented by the examiner which can in any way be considered to teach that a guide sleeve, as it is related to the rest of the structure recited in claim 1, could be considered to be obvious.

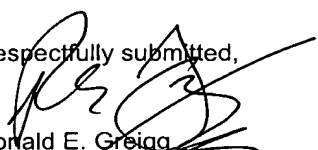
Claims 4, 9, and 24 have also been rejected under 35 USC 103 as unpatentable over Murakami et al in view of the preamble of claim 1. These claims depend on claim 1 and are clearly patentable for the same reasons as claim 1, and furthermore, these claims recite additional structure over that of claim 1.

The examiner has indicated that claims 2-3, 13, 18, 23, 26-27 and 29-30 would be allowable if the problems noted under 35 USC 112 are corrected. It is believed that such has been accomplished by this amendment, and that accordingly such claims should now be allowable.

The examiner also indicated claims 7, 8, 10-12, 19, 22, and 28 are objected to, and these claims also should now be considered to be allowable.

Reconsideration and allowance of all of the claims in this application is respectfully requested.

Respectfully submitted,


Ronald E. Greigg
Registration No. 31,517
Attorney for Applicants
Customer No. 02119

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GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street, Suite One
Alexandria, VA 22314
Telephone: 703-838-5500
Facsimile: 703-838-5554

REG/SLS/hhl